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IN THE CLAIMS

16. (Currently amended): A method for obtaining transgenic plants, comprising

(a1) transforming dicotyledonous plant cells or dicotyledonous plant explants with *Agrobacterium rhizogenes* containing a vector carrying a T-DNA comprising a gene encoding ~~a protein producing H_2O_2 in a context which allows its expression in the plant~~ an H_2O_2 producing protein, wherein said gene is flanked by elements necessary for expression of said gene; and wherein said transformation induces the formation of roots on the transformants;

or

(a2) transforming dicotyledonous plant cells or dicotyledonous plant explants with *Agrobacterium rhizogenes* containing a recombinant DNA comprising both a gene encoding ~~the~~ an H_2O_2 producing protein and a gene encoding a protein of interest ~~in a context allowing their expression in the plant~~ ,wherein said gene encoding the H_2O_2 producing protein and said gene encoding a protein of interest are flanked by elements necessary for expression of said genes; and wherein said transformation induces the formation of roots on the transformants;

and

(b) selecting the transformants which ~~contain and express the gene encoding the~~ express said H_2O_2 producing protein ~~or the gene encoding a protein of interest~~ by a peroxidase-based colorimetric test, wherein said test is carried out in the presence of a substrate for said protein with H_2O_2 producing activity and peroxidase for revealing the formation of H_2O_2;

and

(c) regenerating ~~the~~ transgenic plants ~~from~~ out of the ~~roots~~ selected transformants and monitoring the expression of said H_2O_2 producing protein within the plantlets obtained, wherein said expression is monitored by a peroxidase-based colorimetric test;

and

(d) sorting the plantlets which do not contain the T-DNA of pRi of *Agrobacterium rhizogenes* ~~according to phenotype~~ and optionally carrying out a molecular analysis of the progeny of ~~the transgenic~~ said sorted plants, allowing the selection or the confirmation of ~~transgenic plants obtained~~ the obtainment of transgenic plants only containing ~~only~~ the transgene and not the T-DNA ~~specific to *A. rhizogenes*~~ of pRi of Agrobacterium rhizogenes.

17. (Currently amended): The method ~~according to~~ of claim 16, wherein the ~~colorimetric test in step (b) is carried out on a sample of the root~~ transformation according to step (a1) or (a2) induces the formation of roots on the plant cells or plant explants;

and wherein

step (b) comprises selecting the roots which express said H_2O_2 producing protein by a peroxidase-based colorimetric test, wherein said test is carried out in the presence of a substrate for said protein with H_2O_2 producing activity and peroxidase for revealing the formation of H_2O_2;

and

step (c) comprises regenerating transgenic plants out of the selected roots and monitoring the expression of said H_2O_2 producing protein within the plantlets obtained, wherein said expression is monitored by a peroxidase-based colorimetric test;

and

step (d) comprises sorting the plantlets which do not contain the T-DNA of pRi of *Agrobacterium rhizogenes* and optionally carrying out a molecular analysis of the progeny of said sorted plants, allowing the selection or the confirmation of the obtainment of transgenic plants only containing the transgene and not the T-DNA of pRi of *Agrobacterium rhizogenes*.

18. (Currently amended): The method according to claim 16, wherein ~~the~~ said colorimetric test in step (b) is carried out on ~~a~~ liquid incubation medium ~~for incubation~~ after ~~removing the agrobacteria~~ decontamination of the transformed plant cells or plant explants, wherein said decontamination comprises eliminating agrobacteria from said liquid medium.

Claim 19 canceled.

20. (Currently amended): The method according to claim 16, wherein ~~the~~ said selection in step (b) is carried out in the presence of a saturating concentration of said substrate for said H_2O_2 producing protein, wherein oxidation of said substrate is accompanied by a change of color.

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21. (Currently amended): The method according to claim 20, wherein the saturating concentration of substrate is ~~between~~ from 5 ~~and~~ to 50 mM.

22. (Original): The method according to claim 16, wherein the colorimetric test in step (c) is carried out on a sample of plant tissue from the plantlets obtained.

23. (Currently amended): The method according to claim 16, wherein the gene of interest is a gene of interest which is expressed at a late stage of development of the plant.

24. (Currently amended): The method according to claim 16, wherein the plant cells are plant cells obtained from a member ~~tomato or from a crop~~ selected from the group consisting of rape, cauliflower, sunflower, ~~wheat, corn, barley~~ tomato, and tobacco.

25. (Currently amended): The method according to claim 16, wherein the plant cells are cells of the cotyledons, hypocotyls, petioles, or floral scapes.

26. (Original) The method according to claim 16, wherein the plant cells do not endogenously produce oxalate oxidase.

27. (Original): The method according to claim 16, wherein the protein of interest is an endochitinase.

Claims 28 and 29 canceled.

30. (Original): The method of claim 16, further comprising expressing and purifying the protein of interest.

31. (Original): The method of claim 16, wherein the plant cells are transformed using an expression vector comprising a promoter, wherein said promoter is selected from the

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group consisting of the Cauliflower Mosaic Virus (CaMV) 35S promoter, the superpromoter chimeric promoter SPP, the rice actin promoter, the barley HMGW promoter, the PCRU radish cruciferin gene promoter, the corn γ-zein gene promoter, the *Arabidopsis* PGEA1 promoter and the *Arabidopsis* PGEA6 promoter.

32. (Currently amended): The method of claim 16, wherein the expression of the gene encoding a protein of interest confers resistance to disease caused by an organism selected ~~form~~ from the group consisting of fungi, bacteria, arthropods and nematodes.

Claims 33, 34, and 35 canceled.

36. (New): The method of claim 16, wherein the gene encoding a protein of interest encodes a protein of agronomic or industrial interest.

37. (New): The method of claim 16, wherein the gene encoding a protein of interest encodes a protein conferring resistance to pathogenic agents.

A "clean" version of the claims is provided for the Examiner's convenience.

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